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DOCUMENT-IDENTIFIER: US 6088342 A

TITLE: Dynamic configuration of radio link protocol in a
telecommunications system

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INVENTOR-INFORMATION:

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US-CL-CURRENT: 370/320, 370/471

ABSTRACT:

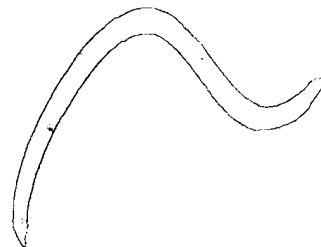
A method and apparatus for dynamically configuring parameters of the radio link protocol layer in a telecommunications system. The method and apparatus allows dynamic configuration of the radio link protocol layer in order to optimize parameters for use with a particular data service. In an embodiment of the invention, radio link protocol control frames used for connection initialization include RLP parameter data. The RLP parameter data is exchanged between two communicating transceiving devices during connection initialization, and is used in each transceiving device to configure subsequently transmitted RLP data frames and transmit retransmission requests accordingly.

10 Claims, 6 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 6

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Application Filing Date - AD (1):

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Brief Summary Text - BSTX (10):

The **RLP** control frame may function as a **negative** acknowledgement (**NAK**)

RLP

control frame. A (**NAK**) **RLP** control frame includes a 4 bit frame type (CTL) field, a four bit length (LEN) field, an 8 bit FIRST field, an 8 bit LAST field, a reserved field (RSVD), a frame check sequence field (FCS) and padding.

An **RLP** control frame having the frame type field set to indicate **negative** acknowledgement (**NAK**) may then be used to request retransmission of a particular data frame, or, a particular sequence of data frames. For example, a mobile station expecting a data frame having a particular **sequence number**, would transmit a **NAK** control frame to the base station if the mobile determined that the data frame was missed. The FIRST and LAST fields of the **RLP** **NAK** control frame are used to indicate the particular data frame, or, **sequence** (indicated as a range beginning at the **sequence number** indicated by the FIRST field and ending at the **sequence number** indicated by the LAST field) of data frames that are requested to be